AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A process of manufacturing an optical waveguide for optically connecting a plurality of optical devices, comprising the steps of:

disposing a resin composition between two or more optical devices, the resin composition comprising a resin and a 1,4-dihydropyridine derivative, wherein the resin comprises at least one member selected from the group consisting of a polyamic acid, a polyimide and a polyamide-imide,

forming an optical path through the resin composition between the optical devices by allowing light having a wavelength capable of inducing a structural change in the 1,4-dihydropyridine derivative to pass through the composition for optical connection to thereby form, in the composition for optical connection, an irradiated part containing a 1,4-dihydropyridine derivative that has been exposed and undergone structural change and a non-irradiated part containing a 1,4-dihydropyridine derivative that has not exposed and not undergone structural change, wherein the optical path comprises the irradiated part, and

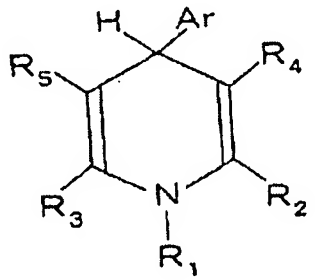
after the optical path formation, removing the 1,4-dihydropyridine derivative that has not undergone structural change from the non-irradiated part while retaining the 1,4-dihydropyridine derivative that has undergone structural change in the irradiated part, thereby making higher a refractive index of the optical path than a refractive index of the other part of the composition for optical connection~~resin composition after formation of the optical path~~.

2. (currently amended): The process according to claim 1, wherein the removal of the 1,4-hydropyridine derivative is carried out by heating so that the 1,4-hydropyridine derivative that has not undergone structural change vaporizes off the non-irradiated part of the resin composition~~comprises at least one member selected from the group consisting of polyamic acid, polyimide and polyamide imide~~.

3. (currently amended): The process according to claim 1 or 2, wherein the resin composition contains ~~0.1 to 30~~1 to 10 parts by weight of the 1,4-dihydropyridine derivative per 100 parts by weight of the resin.

4. (original): The process according to claim 3, wherein the resin composition contains 1 to 5 parts by weight of the 1,4-dihydropyridine derivative per 100 parts by weight of the resin.

5. (original): The process according to claim 1, wherein the 1,4-dihydropyridine derivative comprises a compound represented by formula (I):



(I)

wherein Ar represents an aromatic group having a nitro group at the ortho position with respect to the bond to the 1,4-dihydropyridine ring; R_1 represents –H, $-CH_3$, $-(CH_2)_nCH_3$, $-CF_3$, $-(CF_2)_nCF_3$, $-C_6H_5$, $-(CH_2)_nC_6H_5$, $-CH_2CH=CH_2$, -OH, $-OCH_3$, $-O(CH_2)_nCH_3$, $-OCF_3$, $-O(CF_2)_nCF_3$, -

OC_6H_5, $-O(CH_2)_nC_6H_5$, -COOH, $-COOCH_3$, $-COO(CH_2)_nCH_3$, $-COCH_3$, $-CO(CH_2)_nCH_3$, $-(CH_2)_nOH$, $-(CH_2)_nCOOH$, $-NO_x$, -F, -Cl, -Br or –I; R_2 and R_3, which may be the same or different, each represent –H, $-CH_3$, $-(CH_2)_nCH_3$, $-CF_3$, $-(CF_2)_nCF_3$, -OH, $-OCH_3$, $-O(CH_2)_nCH_3$, $-OCF_3$, $-O(CF_2)_nCF_3$, $-COOCH_3$, $-COO(CH_2)_nCH_3$, $-COCH_3$, $-CO(CH_2)_nCH_3$, $-(CH_2)_nOH$, $-(CH_2)_nCOOH$, $-NO_x$, -F, -Cl, -Br or –I; R_4 and R_5, which may be the same or different, each represent –H, -CN, $-COOR_z$, $-COR_z$ or $-CONHR_z$; n represents an integer of 1 to 4; and R_z represents a hydrogen atom or an alkyl group having 1 to 6 carbon atoms.

6. (original): The process according to claim 5, wherein R_1 is –H, $-CH_3$ or $-(CH_2)_nCH_3$, R_2 and R_3 each independently represent –H, $-CH_3$ or $-(CH_2)_nCH_3$, R_4 and R_5 each independently represent $-COOR_z$ or $-COR_z$, wherein R_z is a hydrogen atom or an alkyl group having 1 to 6 carbon atoms and n is an integer of 1 to 4.

7. (original): The process according to claim 5, wherein the 1,4-dihydropyridine derivative comprises at least one compound selected from the group consisting of 1-ethyl-3,5-dimethoxycarbonyl-4-(2-nitrophenyl)-1,4-dihydropyridine, 1-methyl-3,5-dimethoxycarbonyl-4-(2-nitrophenyl)-1,4-dihydropyridine, 1-propyl-3,5-dimethoxycarbonyl-4-(2-nitrophenyl)-1,4-dihydropyridine, 1-propyl-3,5-diethoxycarbonyl-4-(2-nitrophenyl)-1,4-dihydropyridine, 2,6-dimethyl-3,5-dimethoxycarbonyl-4-(2-nitrophenyl)-1,4-dihydropyridine, 2,6-dimethyl-3,5-diacetyl-4-(2-nitrophenyl)-1,4-dihydropyridine, and 1-ethyl-2,6-dimethyl-3,5-diacetyl-4-(2-nitrophenyl)-1,4-dihydropyridine.

8. (original): The process according to claim 7, wherein the 1,4-dihydropyridine derivative comprises 1-ethyl-3,5-dimethoxycarbonyl-4-(2-nitrophenyl)-1,4-dihydropyridine.

9. (original): The process according to claim 7, wherein the 1,4-dihydropyridine derivative comprises at least one of 2,6-dimethyl-3,5-diacetyl-4-(2-nitrophenyl)-1,4-dihydropyridine and 1-ethyl-2,6-dimethyl-3,5-diacetyl-4-(2-nitrophenyl)-1,4-dihydropyridine.

10. (canceled).

11. (previously presented): The process according to claim 2, wherein the resin is fluorinated.

12. (previously presented): A connection structure of optical devices comprising:

two or more optical devices; and

at least one optical waveguide optically connecting the optical devices, the optical waveguide being formed by a process according to any one of claims 1-2, 5-9 and 11.

13. (previously presented): A connection structure of optical devices comprising:

two or more optical devices; and

at least one optical waveguide optically connecting the optical devices, the optical waveguide being formed by a process according to claim 3.

14. (previously presented): A connection structure of optical devices comprising:

two or more optical devices; and

at least one optical waveguide optically connecting the optical devices, the optical waveguide being formed by a process according to claim 4.